

AMENDMENTS TO THE SPECIFICATION

I. Please replace the first Paragraph on page 1, with the following amended Paragraph:

This Patent Application is a Continuation-in-Part of Serial #09/986,845, filed on 13 November 2001, ~~currently pending~~ now abandoned.

II. Please replace the Paragraph beginning on page 2, line 29, and ending on page 3, line 6, with the following amended Paragraph:

In addition, this prior art provided ramparts 14 and the insulating stripes 18 are formed by nonmetallic insulating material or photoresist polymer material. During the procedure, the nonmetallic material or the polymer material easily absorb the outside humidification or moisture. After forming ~~an~~ a protective sealing layer 19, the humidification or moisture in ramparts 14 and the insulating stripes 18 will release. Therefore, it will seriously influence the luminescence efficiency and the lifetime of the OLED device.

III. Please replace the two consecutive Paragraphs on page 3, beginning on line 8 and ending on line 15, with the following amended Paragraphs:

Therefore, the present invention has been made to solve such problems in view of the forgoing status. It is the primary object of the present invention to provide an organic EL device having a good cooling function to effectively dissipate the heat, so as to remarkably prolong the lifetime of the device.

It is another object of the present invention to provide an organic EL device having good de humidification functions to effectively avoid the outside moisture, so as to prevent the generation of undesirable dark spots.

IV. Please replace the Paragraph beginning on page 3, line 23, and ending on page 4, line 4, with the following amended Paragraph:

In order to achieve the foregoing objects, the present invention provides an organic EL device, comprising: a substrate; a plurality of first electrodes formed on the surface of said substrate; a plurality of divisions of the organic layer, formed on said first electrodes and being superimposed perpendicularly upon said

first electrodes, said organic layer comprising at least one organic EL layer; a plurality of second electrodes [[,]] formed on said organic layer; a plurality of bottom insulating pads, each disposed between said divisions of said organic layer and on the two sides of said organic layer; and a plurality of heat sinks formed of a metallic ~~materials~~ material, each disposed on one of said bottom insulating pads.

**V. Please replace the BRIEF DESCRIPTION OF THE
DRAWINGS Section, with the following amended BRIEF DESCRIPTION
OF THE DRAWINGS:**

The objects, spirits and advantages of the preferred embodiments of the present invention will be readily understood by the accompanying drawings and detailed descriptions, wherein:

FIG. 1 is a 3D schematic view showing the structure of an organic EL device in accordance with the prior art;

FIG. 2 is an enlarged cross-sectional view showing the structure of the organic EL device of FIG. 1;

FIG. 3A is a cross-sectional view showing the structure of an organic EL device in accordance with one embodiment of the present invention;

FIG. 3B is a vertical schematic view showing the embodiment as shown in FIG. 3A;

FIG. 4A is a 3D schematic view showing the process of the embodiment as shown in FIG. 3A;

FIG. ~~[[4A]]~~ 4B to FIG. 4F are cross-sectional views showing the process of the embodiment along the line ~~[[7-7]]~~ 4-4 as shown in FIG. 4A;

FIG. 5 is a cross-sectional view showing the structure of an organic EL device in accordance with another embodiment of the present invention;

FIG. 6 is a cross-sectional view showing the structure of an organic EL device in accordance with still another embodiment of the present invention;

FIG. 7 is a cross-sectional view showing the structure of an organic EL device in accordance with still another embodiment of the present invention;

FIG. 8 is a cross-sectional view showing the structure of an organic EL device in accordance with still another embodiment of the present invention; and

FIG. 9 is a cross-sectional view showing the structure of an organic EL device in accordance with still another embodiment of the present invention.

VI. Please replace the Paragraph beginning on page 6, line 13, and ending on page 7, line 6, with the following amended Paragraph:

To start with, please refer to FIG. 3A and FIG. 3B, which are a cross-sectional view and a vertical view of the structure of an organic EL device in accordance with one embodiment of the present invention. As shown in the figures, the organic EL device comprises: a substrate 30; a plurality of first electrodes 32; a plurality divisions of an organic layer 34; a plurality of second electrodes 38; a plurality of bottom insulating pads 362; and a plurality of metallic heat sinks; wherein the first electrodes 32 are formed on the surface of the substrate 30; the organic layer 34 comprises ~~comprising~~ at least one organic EL layer [[,]] and is formed on the first electrodes 32 and is superimposed perpendicularly upon the first electrodes 32; a second electrode 38 is formed on each division of the organic layer 34; and the bottom insulating pads 362 are disposed between the divisions of the organic layer 34 and on the two sides of the organic layer 34, so that the organic layer 34 is divided and the matrix grids in the device are precisely positioned; the thickness of the bottom insulating pads 362 is larger than that of the organic layer 34 and a metallic heat sink 372 is disposed on each of the bottom insulating pads 362, so that the high temperature generated during the luminescence of the organic layer 34 can be conducted through each of the bottom insulating pads 362 and then dissipates. Therefore, the temperature

during operation is lowered and the lifetime is prolonged. In addition, this can prevents a short circuit between the organic layer 34 and the metallic heat sink 372.

VII. Please replace the two consecutive Paragraphs on page 7, beginning on line 7 and ending on line 23, with the following amended Paragraphs:

The present invention can also be implemented by using a rampart 392 formed on each of the metallic heat sinks 372, wherein the width of the rampart 392 is larger than the metallic heat sink 372 and thus overhanging portions 395 are formed, so that the organic layer 34 is formed by using tilt evaporation to be wider than the distance between two overhanging portions 395 and the second electrodes 38 are formed by using vertical evaporation to be electrically isolated from the first electrodes 32. The organic layer 34 can be one of a red light emitting organic layer (R), a green light emitting organic layer (G), a blue light emitting organic layer (B) and their combination.

The present invention ~~is used~~ uses the metallic heat sink 372, which is formed ~~by of a metallic materials material so as to have the purpose~~ that the metallic material ~~materials~~ neither easily absorb the outside ~~humidification~~

humidity or moisture, nor release the ~~humidification~~ humidity or moisture in the protective layer to destroy the organic layer 34 after ~~forming an~~ formation of a protective sealing layer (or overlaying protective case). Therefore, the OLED device can be ensured of a high ~~the~~ luminescence efficiency and ~~the~~ a prolonged lifetime ~~of device~~.